

Monitoring Data Record

Project Title: R-3415 NC 67 Widening COE Action ID: 200520314
Stream Name: Williams Creek & UT Williams Creek (Site 3) DWQ Number: 05-0061
City, County and other Location Information: NC 67 3.2 miles west of Boonville and just west of
Haley Road (Sta. 141+50 -L- LT. and 143+00 -L- LT.); Yadkin county
Date Construction Completed: Streambank repairs completed in June 2010
Monitoring Year: (1) of 3
Ecoregion: _____ 8 digit HUC unit 03040101
USGS Quad Name and Coordinates: N 36 14' 26" W 80 45' 52"

Rosgen Classification: _____

Length of Project: Williams Creek (211 feet) & UT Williams Creek (74 feet)
Urban or Rural: Rural Watershed Size: _____
Monitoring DATA collected by: J. Young and J. Lancaster Date: 8/16/11

Applicant Information:

Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Road Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

Consultant Information:

Name: _____
Address: _____
Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level 1

Permit states: The permittee shall visually monitor the vegetative plantings to assess and ensure complete stabilization of the mitigation stream segments. The monitoring shall be conducted annually for a minimum of 3 years after final planting. Photo documentation should be utilized to document the success of the riparian vegetation and submitted to DWQ in a final report. After 3 years a site visit shall be conducted by DWQ to "close out" the mitigation site.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: _____

Williams Creek: 2 photos were taken before and after construction and 1 photo was taken of the Year 1 monitoring evaluation

UT Williams Creek: 1 photo was taken before construction and 1 photo was taken of the Year 1 monitoring evaluation

Dates reference photos have been taken at this site: 8/16/11

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: A site map is included with this report showing the photo point locations.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:_____

ADDITIONAL COMMENTS: Planted vegetation noted surviving included black willow, silky dogwood, and sycamore. Other vegetation noted included woolgrass, alder, and kudzu. Both Williams Creek and UT Williams Creek are covered with kudzu as seen in the August 16, 2011 photos, but these stream relocations were covered with kudzu prior to construction.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

Williams Creek and UT Williams Creek (Site 3) are stable for the Year 1 monitoring evaluation. The relocated channels have provided a more natural setting for the stream and placed it farther away from the roadway. The retaining wall and concrete slabs at Site 3 before construction have been replaced with 2:1 earthen slopes that were seeded with native grasses, matted with coir fiber, and live staked. A cross vane rock weir was also installed for channel stability. Both stream relocations were covered with kudzu prior to construction and are still covered with kudzu today but these stream relocations are more stable due to the natural channel design being implemented. NCDOT will continue to monitor these stream relocations.

Date	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

Section 4. DEBIT LEDGER

The entire Williams Creek and UT to Williams Creek (Site 3) stream mitigation site was used for the R-3415 project to compensate for unavoidable stream impacts.

Williams Creek (Site 3)



Before construction photo looking downstream



After construction photo looking downstream



Year 1 monitoring photo looking downstream (8-16-11)

UT Williams Creek (Site 3)



Before construction photo looking downstream



Year 1 monitoring photo looking upstream (8-16-11)

